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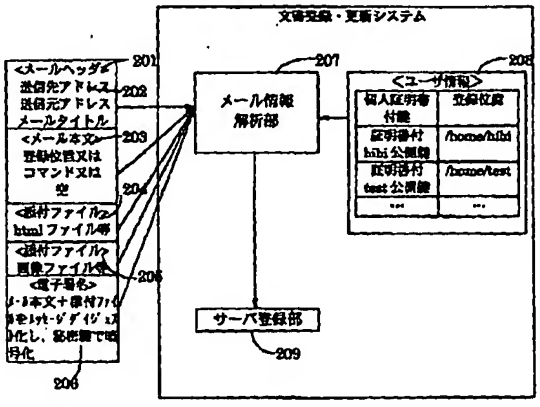
(54)【発明の名称】共有文書管理装置への文書登録・更新方法

(57)【要約】
【課題】ユーザ毎に指定された登録位置あるいはユーザ任意の登録位置に容易に文書（添付ファイル）を登録することが可能とし、さらに文書（添付ファイル）をユーザ任意の形式に変換してから登録する手段を提供する。
【解決手段】クライアントで文書を作成して電子メールの添付ファイルにして作成した文書を登録専用の送信先アドレス宛に送信し、送信された電子メールを取り込んでヘッダ情報の送信元アドレスと、サーバ内にあらかじめ用意してあるメールアドレス、登録位置情報、個人証明書などからなるユーザ情報に基づいてサーバへの登録位置を決定し、添付ファイルをサーバへ登録する。
【効果】

図2



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Notes:
1. Untranslatable words are replaced with asterisks (****).
2. Texts in the figures are not translated and shown as it is.

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FULL CONTENTS

[Claim(s)]
[Claim 1] There is a system which consists of a client which draws up / peruses the document shared with the share document server used on a network. A user transmits to addressing to a transmission destination address only for [the document which drew up the document, made the attachment of the E-mail and was drawn up] registration, take in the transmitted E-mail, and The transmission source address of header information, The document registration / updating method to the share documentation-management equipment characterized by determining the registration position to the storage which a document share server reads based on User Information which consists of an e-mail address, registration position information, a personal certificate, etc. which have been prepared beforehand in a server, and registering an attachment.
[Claim 2] The document registration / updating method to the share documentation-management equipment characterized by registering with a share document server since the attachment of this mail is transformed to the electronic mail body which transmits from the client in above-mentioned Claim 1 by describing a conversion command.
[Claim 3] The document registration / updating method to the share documentation-management equipment characterized by the registration position information in the case of wanting to register with places other than the registration position defined by describing the registration position information of user arbitration to the electronic mail body which transmits from the client in above-mentioned Claim 1 as User Information changing.

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the registration technology to the information-sharing server (a WWW server, FTP server) in the Internet or intranet especially about the document registration to the share equipment in the case of sharing a document using a network, and the updating method.
[0002]

[Description of the Prior Art] The number of use is explosively extended in recent years as Media of the information dispatch with easy WWW (World Wide Web) of the Internet or intranet, and information sharing. This WWW can disseminate easily the multimedia information which combined a character, a picture, sound, etc. to many and unspecified human beings. It is created by some description languages (mainly HTML) and programming language as data for that, and is related with attached data, such as a picture and sound.
[0003] In order to send document information by present WWW, it is necessary to create the file groups (an HTML file, a picture, sound data, etc.) which constitute the page in WWW by a client generally, and to copy it to the WWW server which is share documentation-management equipment. Then, FTP (File Transfer Protocol) is used in many cases, and the knowledge of FTP is required.
[0004] Although it is also possible to collect and disseminate the information from many and unspecified human beings by using CGI (Common Gateway Interface) of WWW as a registration method to other share document temporary equipment Since it must always connect while writing the document at the time of dialup connection use on the Internet, there is a demerit that connection fees become high. Moreover, a character takes the lead and it is hard to treat multimedia information, including a picture, sound, etc. The following technology is invented in order to solve these problems.
[0005] In JP,H10-63592,A, a mail text is automatically HTML-ized by the server side using an E-mail, a table of contents is also created automatically, and the bulletin board system is built. And the system which manages a bulletin board system by writing a command to a mail text is indicated.
[0006]
[Problem to be solved by the invention] There are the following problems with the conventional technology.
[0007] - In the registration procedure to a server, specification of a registration position (directory) is limited to below the bulletin board system, and registration is impossible for the position for every user.
[0008] - In the registration to a server, a user cannot specify it as arbitrary positions.
[0009] - An attachment is not convertible for arbitrary form.
[0010] In order that this invention may solve these problems, it is the 1st purpose to register a document (attachment) into the registration position specified for every user or the registration position of user arbitration.
[0011] furthermore, this invention -- a document (attachment) -- a user -- it sets it as the 2nd purpose to offer a means to register after changing into arbitrary form.
[0012]
[Means for solving problem] In order to attain the above-mentioned purpose, there is a system which consists of a client which draws up / peruses the document shared with the share document server used on a network. A user transmits to addressing to a transmission destination address only for [the document which drew up the document, made the attachment of the E-mail and was drawn up] registration, take in the transmitted E-mail, and The transmission source address of header information, The registration position to the storage

which a document share server reads based on User Information which consists of an e-mail address, registration position information, a personal certificate, etc. which have been prepared beforehand in a server is determined, and an attachment is registered.
[0013] Since the attachment of this mail is transformed to the electronic mail body which transmits from a client in addition to the above by describing a conversion command, it registers with a share document server.
[0014] The registration position information in the case of wanting to register with places other than the registration position defined by describing the registration position information of user arbitration to the electronic mail body which transmits from a client in addition to the above as User Information changes.
[0015]
[Mode for carrying out the invention] Drawing 1 is an entire configuration figure at the time of use of this invention system which transmitted the E-mail created by the mail client, was sent to the document registration update system via the mail server, was saved as a share document at storage, and was tied by the document inspection client. Drawing 2 hits 104 in drawing 1, and is a document registration update structure-of-a-system figure in the form of operation by this invention.
[0016] The form of the 1st operation is explained hereafter.
[0017] The document to share between the client 101 of drawing 1 is drawn up beforehand, the exclusive e-mail address for registering with share documentation-management equipment 102 is made into the transmission destination address of a mail header 202, and transmitting mail of the document drawn up previously is attached and carried out. It is the same as the usual E-mail with an attachment so far. The E-mail by which it came to the e-mail address only for registration is passed to document registration / updating system 104 using this invention, and processing of drawing 2 is started.
[0018] The mail information analysis section 207 in drawing 2 is drawing 4 , and describes drawing 3 and the server registration section 209 in details, respectively. In drawing 2 , it is taken into the mail information analysis section 207, and the sent E-mail separates to a mail header 202, the mail text 203, the attachment 204, the attachment 205, and the electronic signature 206, respectively, and is held. Although there are two attachments (204,205) of E-mail 201, what is necessary is just one or more.
[0019] As processing when an E-mail comes, [the mail information analysis section 207] The transmission source address included in a mail header 202 in Step 302 [origin] From User Information 208 which is the table which became a pair, the personal certificate (the e-mail address is contained) beforehand prepared for the server and registration position information extract an applicable certificate and registration position information, and progress to Step 303. When there is no relevance, in 306, user authentication is improper, and it is reported to a transmission source address by e-mail that it cannot register.
[0020] Next, a digest is generated from e-mail and the public key of the individual in User Information 208 at Step 303, and it attests by comparing the digest attached at Step 304. As a result of authentication, if it is the same case,

registration position information and the taken-in attachment 204,205 are passed to the server registration section 209 (= step 401). One or plural (two or more) are sufficient as the attachment at this time.
[0021] When it differs, it judges that there were an alteration and spoofing of a message and processes by the authentication error processing 306. In the following server registration section 209, the attachment 204,205 is arranged to the registration position of the storage 105 at Step 402. After that, the registered document is read by the share document server and it is displayed by a document inspection client.
[0022] Next, the form of the 2nd operation is explained.
[0023] Invention of a working example 2 is adding a document conversion function to invention of a working example 1, and is invention of the method corresponding to various pieces of share documentation-management equipment. Although the system configuration is the same as the time of a working example 1 at drawing 2 , the interior of the mail information analysis section 207 and the server registration section 209 changes, and it becomes like drawing 5 and drawing 6 .
[0024] As processing when an E-mail comes by a working example 2, [the mail information analysis section 207] The transmission source address included in a mail header 202 in Step 502 [origin] From User Information 208 which is the table which became a pair, the personal certificate (the e-mail address is contained) beforehand prepared for the server and registration position information extract an applicable certificate and registration position information, and progress to Step 503.
[0025] When there is no relevance, user authentication is improper, and e-mail reports to a transmission source address that it cannot register. Next, a digest is generated from e-mail and the public key of the individual in User Information 208 at Step 503, and it attests by comparing the digest attached at Step 504.
[0026] As a result of authentication, if it is the same case, registration position information and the taken-in attachment 204,205 are passed to Step 505. One or plural (two or more) are sufficient as the attachment at this time. When it differs, it judges that there were an alteration and spoofing of a message and processes by the authentication error processing 506.
[0027] Next, in the working example 2, to the mail text 203 [a conversion command name (for example, a command like doc2html which changes a document / Word / Microsoft YO / [Microsoft Word is the merchandise name of U.S. Microsoft Corp.] / into a Html document)] Since it describes, in Step 505, it progresses to Step 507 from command existence (existence of a mail text). [information / (it corresponds to the position of a command name and an actual conversion command) / which has been prepared beforehand / command definition] The existence of the command concerned is checked, when there is nothing, error processing is carried out at Step 510, when it is, the positions (for example, /usr/bin/doc2html) of a conversion command are returned, and it progresses to Step 509 with the registration position information and the attachment which are old information.
[0028] Next, it progresses to Step 602 as the server registration section 209, the

existence of a conversion command is investigated, and when there is nothing, it progresses to Step 606 by the same processing as a working example 1. When it is, it progresses to Step 603, and if the conversion which passes and performs an attachment as a conversion command and its option is successful, it will progress to Step 606 with a conversion result and registration position information as it is. At the time of conversion failure, error processing (for example, receiving a sending person the message of the purport of conversion failure transmission) is carried out. At Step 606, an attachment or the changed file is arranged based on registration position information. About doc2html which existed on the Internet and was raised in the example about various conversion commands here, details are in http://www.emacsys.com/.

[0029] Next, the form of the 3rd operation is explained.

[0030] Although the attachment of the E-mail had determined the registration position in invention of a working example 1 according to the registration position beforehand defined as User Information 208 User Information 208 is not changed into change of a registration position, but change is easily realized for a registration position by registering with a mail text.

[0031] Although the system configuration figure is the same as that of a working example 1 at drawing 2 , the interior of the e-mail analysis section 207 becomes like drawing 7 . As processing when an E-mail comes by a working example 3 The transmission source address included in a mail header 202 in Step 702 in the mail information analysis section 207 [origin] From User Information 208 which is the table which became a pair, the personal certificate (the e-mail address is contained) beforehand prepared for the server and registration position information extract an applicable certificate and registration position information, and progress to Step 705.

[0032] When there is no relevance, user authentication is improper, and e-mail reports to a transmission source address that it cannot register. Next, a digest is generated from e-mail and the public key of the individual in User Information 208 at Step 703, and it attests by comparing the digest attached at Step 704.

[0033] As a result of authentication, if it is the same case, registration position information and the taken-in attachment 204,205 are passed to Step 705. One or plural (two or more) are sufficient as the attachment at this time. When it differs, it judges that there were an alteration and spoofing of a message and processes by the authentication error processing 706.

[0034] At Step 705, the contents existence of a mail text is checked, when there is nothing, it goes to Step 708, and the registration position information and the attachment 204,205 which suited User Information 208 are passed to the server registration section 209, and it is processed like drawing 4 of the example 1 of back realization. When there is a mail text, that check which is a directory is performed and, in the case of a directory, it progresses to Step 708 by making it into registration position information. In other than a directory, it is processed at Step 709 as an error.

[0035]

[Effect of the Invention] Since the effect of the invention can arrange a document automatically to the registration position of the fixation for every user of share

document equipment, even if the user who registers is not conscious of a directory, it can be easily registered into an individual place. Furthermore, since an automatic conversion portion like the conventional technology is not indispensable, it is easy for utilization.

[0036] Furthermore, since it can register by describing a conversion command to a mail text after changing an attachment into the format of user arbitration (it needs preparation of a conversion program, and to be registered separately for using it) Merritt of it becoming unnecessary for a user to have a conversion program in a local machine is made.

[0037] Moreover, since places other than a standard can be written to a mail text for the registration office in an individual, the convenience which can arrange a file in the positions where a user is arbitrary in addition to the ease of file registration spreads.

[Brief Description of the Drawings]

[Drawing 1] It is the figure showing the example of a system configuration at the time of this invention use.

[Drawing 2] It is the block diagram showing the document renewal registration system of this invention.

[Drawing 3] It is the flow chart which showed the procedure of the information analysis section 207 at the time of a document registration update.

[Drawing 4] It is a flow chart at the time of registration about a document.

[Drawing 5] It is the internal flow chart of the e-mail analysis section 207 at the time of transform processing by a command.

[Drawing 6] It is the internal flow chart of the server registration section 209 at the time of transform processing by a command.

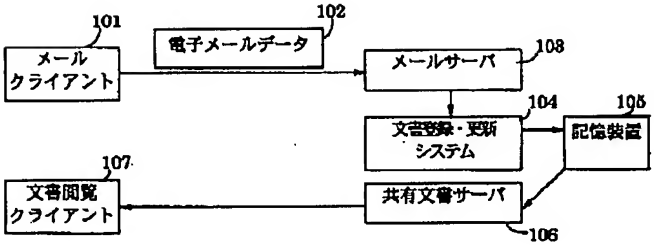
[Drawing 7] It is the internal flow chart of the e-mail analysis section 207 at the time of registration position specification of user arbitration.

[Explanations of letters or numerals]

101 -- A mail client, 102 -- An E-mail, 103 -- Mail server, 104 -- Document registration / updating system, 105 -- Storage, 106 -- Share document equipment, 107 -- A document inspection client, 201 -- Electronic mail data, 202 -- Mail header, 203 [-- Electronic signature,] -- A mail text, 204 -- Attachments 1 and 205 -- Attachments 2 and 206 207 -- The mail information analysis section, 208 -- User Information, 209 -- Server registration section, 301 -- Data taking in, 302 -- The User Information acquisition, 303 -- Message digest generation, 304 [-- #305 data acquisition, 402 / -- Attachment arrangement processing, 510 / -- Command invalid error processing, 601 / -- Data taking in, 707 / -- Registration-position-information check.] -- Comparison of a digest, 305 -- Registration position information, an attachment output, 306 -- Authentication error processing, 401

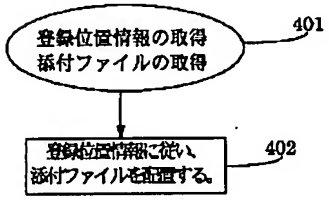
[Drawing 1]

図1



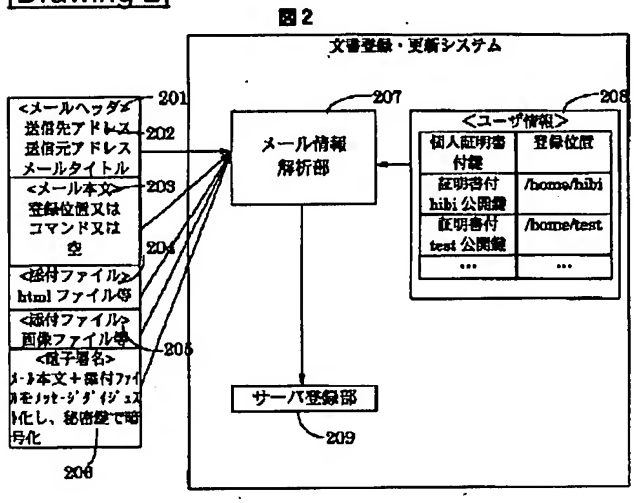
[Drawing 4]

図4



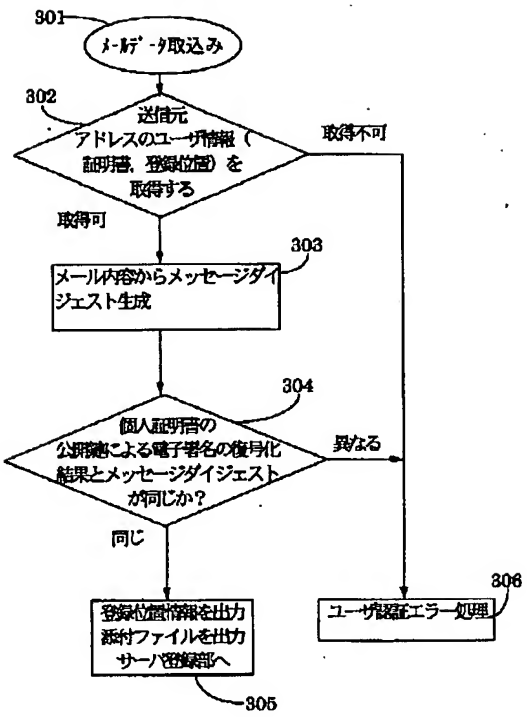
[Drawing 2]

図2



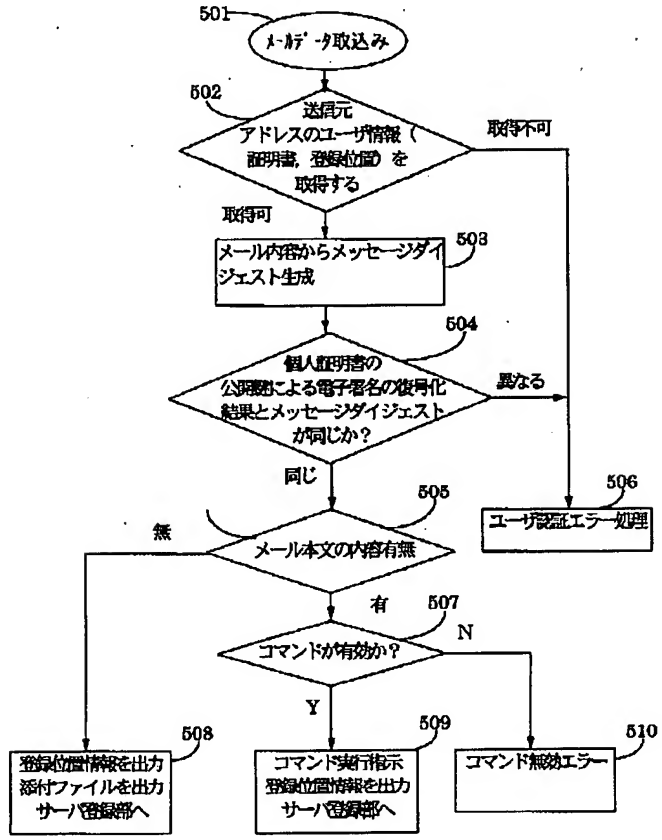
[Drawing 3]

図3



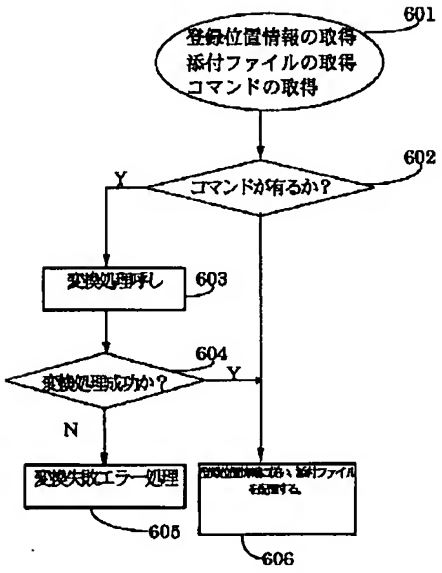
[Drawing 5]

図5



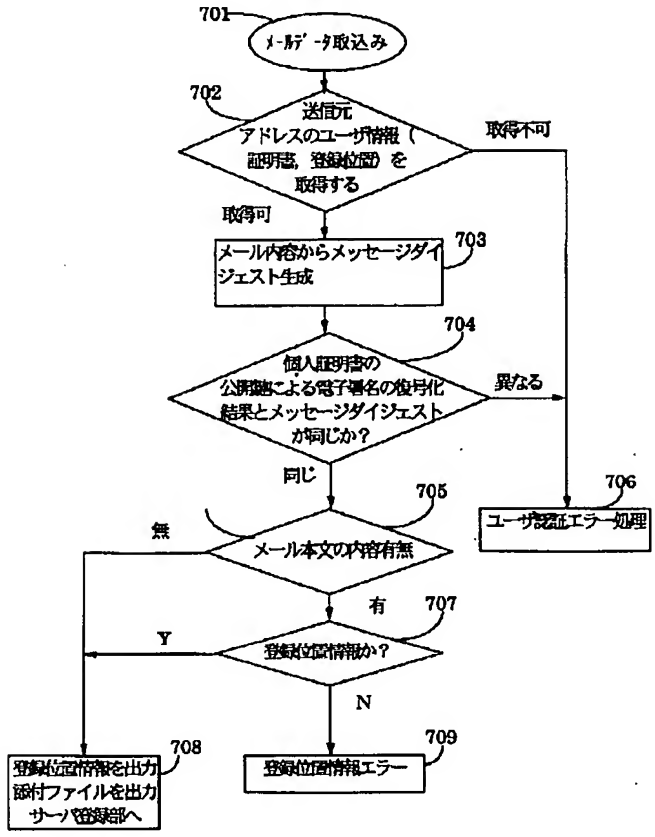
[Drawing 6]

図 6



[Drawing 7]

図 7



[Translation done.]